FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO Bastrop Energy Partners, L.P.

AUTHORIZING THE OPERATION OF
Bastrop Energy Center
Electric Services

LOCATED AT
Bastrop County, Texas
Latitude 30° 8' 47" Longitude 97° 32' 48"
Regulated Entity Number: RN101056851

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site, emission units and affected source listed in this permit. Operations of the site, emission units and affected source listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site, emission units and affected source authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site, emission units and affected source.

Permit No: _	02109	Issuance Date: _	
For the C	ommission	1	

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General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

Special Terms and Conditions: Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

- 1. Permit holder shall comply with the following requirements:
 - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
 - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.

- C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.
- D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.
- E. Emission units subject to 40 CFR Part 63, Subpart ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, § 113.1090 which incorporates the 40 CFR Part 63 Subpart by reference.
- F. For the purpose of generating discrete emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 4 (Discrete Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:
 - (i) Title 30 TAC § 101.372 (relating to General Provisions)
 - (ii) Title 30 TAC § 101.373 (relating to Discrete Emission Reduction Credit Generation and Certification)
 - (iii) Title 30 TAC § 101.374 (relating to Mobile Discrete Emission Reduction Credit Generation and Certification)
 - (iv) Title 30 TAC § 101.378 (relating to Discrete Emission Credit Banking and Trading)
 - (v) The terms and conditions by which the emission limits are established to generate the discrete reduction credit are applicable requirements of this permit
- 2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
 - A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
 - B. Title 30 TAC § 101.3 (relating to Circumvention)
 - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ

- D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
- E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
- F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
- G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
- H. Title 30 TAC § 101.221 (relating to Operational Requirements)
- I. Title 30 TAC § 101.222 (relating to Demonstrations)
- J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
- 3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
 - A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:
 - (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
 - (ii) Title 30 TAC § 111.111(a)(1)(E)
 - (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
 - (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the

- "Applicable Requirements Summary" attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:
- (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
- (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.
- (3) Records of all observations shall be maintained.
- Visible emissions observations of emission units operated (4)during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
- (5) Compliance Certification:

- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
- (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
- (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.
- B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:
 - (i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)
 - (ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)
 - (iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:

- (1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.
- (2) Records of all observations shall be maintained.
- Visible emissions observations of air emission sources or (3)enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(4) Compliance Certification:

- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A)
- (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is

performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader

- C. For visible emissions from all other sources not specified in 30 TAC § 111.111(a)(1), (4), or (7); the permit holder shall comply with the following requirements:
 - (i) Title 30 TAC § 111.111(a)(8)(A) (relating to Requirements for Specified Sources)
 - (ii) Title 30 TAC § 111.111(a)(8)(B)(i) or (ii)
 - (iii) For a source subject to 30 TAC \S 111.111(a)(8)(A), complying with 30 TAC \S 111.111(a)(8)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC \S 122.146:
 - (1) An observation of visible emissions from a source which is required to comply with 30 TAC § 111.111(a)(8)(A) shall be conducted at least once during each calendar quarter unless the source is not operating for the entire quarter.
 - (2) Records of all observations shall be maintained.
 - (3)Visible emissions observations of sources operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of sources operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each source in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each source during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within

the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

- (4) Compliance Certification:
 - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(8) and (a)(8)(A)
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(8)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
- D. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
- E. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).
- F. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
 - (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)

- (ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)
- (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
- 4. The permit holder shall comply with the following 30 TAC Chapter 115, Subchapter F requirements (relating to Cutback Asphalt Requirements):
 - A. Title 30 TAC § 115.512(3) (relating to Control Requirements)
- 5. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
 - A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
 - B. Title 40 CFR § 60.8 (relating to Performance Tests)
 - C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
 - D. Title 40 CFR § 60.12 (relating to Circumvention)
 - E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
 - F. Title 40 CFR § 60.14 (relating to Modification)
 - G. Title 40 CFR § 60.15 (relating to Reconstruction)
 - H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)
- 6. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.
- 7. The permit holder shall comply with certified registrations submitted to the TCEQ for purposes of establishing federally enforceable emission limits. A copy of the certified registration shall be maintained with the permit. Records sufficient to demonstrate compliance with the established limits shall be maintained. The certified registration and records demonstrating compliance shall be provided, on request, to representatives of the appropriate TCEQ regional office and any local air pollution control agency having jurisdiction over the site. The permit holder shall submit updated certified registrations when changes at the site require establishment of new emission limits. If changes result in emissions that do not remain below major source thresholds, the permit

holder shall submit a revision application to codify the appropriate requirements in the permit.

Additional Monitoring Requirements

8. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

- 9. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
 - A. Are incorporated by reference into this permit as applicable requirements
 - B. Shall be located with this operating permit
 - C. Are not eligible for a permit shield
- 10. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
- 11. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering

calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

Compliance Requirements

- 12. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
- 13. Use of Discrete Emission Credits to comply with the applicable requirements:
 - A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
 - (i) Title 30 TAC Chapter 115
 - (ii) Title 30 TAC Chapter 117
 - (iii) If applicable, offsets for Title 30 TAC Chapter 116
 - (iv) Temporarily exceed state NSR permit allowables
 - B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
 - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
 - (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
 - (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
 - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122

(v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

Protection of Stratospheric Ozone

- 14. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone:
 - A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.

Permit Location

15. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Permit Shield (30 TAC § 122.148)

16. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

Acid Rain Permit Requirements

- 17. For units CTG-1A and CTG-1B, located at the affected source identified by ORIS/Facility code 55168, the designated representative and the owner or operator, as applicable, shall comply with the following Acid Rain Permit requirements.
 - A. General Requirements

- (i) Under 30 TAC § 122.12(1) and 40 CFR Part 72, the Acid Rain Permit requirements contained here are a separable portion of the Federal Operating Permit (FOP) and have an independent public comment process which may be separate from, or combined with the FOP.
- (ii) The owner and operator shall comply with the requirements of 40 CFR Part 72 and 40 CFR Part 76. Any noncompliance with the Acid Rain Permit will be considered noncompliance with the FOP and may be subject to enforcement action.
- (iii) The owners and operators of the affected source shall operate the source and the unit in compliance with the requirements of this Acid Rain Permit and all other applicable State and federal requirements.
- (iv) The owners and operators of the affected source shall comply with the General Terms and Conditions of the FOP that incorporates this Acid Rain Permit.
- (v) The term for the Acid Rain permit shall commence with the issuance of the FOP that incorporates the Acid Rain permit and shall be run concurrent with the remainder of the term of the FOP. Renewal of the Acid Rain permit shall coincide with the renewal of the FOP that incorporates the Acid Rain permit and subsequent terms shall be no more than five years from the date of renewal of the FOP and run concurrent with the permit term of the FOP.

B. Monitoring Requirements

- (i) The owners and operators, and the designated representative, of the affected source and each affected unit at the source shall comply with the monitoring requirements contained 40 CFR Part 75.
- (ii) The emissions measurements recorded and reported in accordance with 40 CFR Part 75 and any other credible evidence shall be used to determine compliance by the affected source with the acid rain emissions limitations and emissions reduction requirements for SO₂ and NO_x under the ARP.
- (iii) The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emission of other pollutants or other emissions characteristics at the unit under other applicable requirements of the FCAA Amendments (42 U.S.C. 7401, as amended November 15, 1990) and other terms and conditions of the operating permit for the source.

C. SO₂ emissions requirements

- (i) The owners and operators of each source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for SO₂.
- (ii) As of the allowance transfer deadline the owners and operators of the affected source and each affected unit at the source shall hold, in the unit's compliance subaccount, allowances in an amount not less than the total annual emissions of SO₂ for the previous calendar year.
- (iii) Each ton of SO₂ emitted in excess of the acid rain emissions limitations for SO₂ shall constitute a separate violation of the FCAA amendments.
- (iv) An affected unit shall be subject to the requirements under (i) and (ii) of the SO₂ emissions requirements as follows:
 - (1) Starting January 1, 2000, an affected unit under 40 CFR § 72.6(a)(2); or
 - (2) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR Part 75, an affected unit under 40 CFR § 72.6(a)(3).
- (v) Allowances shall be held in, deducted from, or transferred into or among Allowance Tracking System accounts in accordance with the requirements of the ARP.
- (vi) An allowance shall not be deducted, for compliance with the requirements of this permit, in a calendar year before the year for which the allowance was allocated.
- (vii) An allowance allocated by the EPA Administrator or under the ARP is a limited authorization to emit SO₂ in accordance with the ARP. No provision of the ARP, Acid Rain permit application, this Acid Rain Permit, or an exemption under 40 CFR §§ 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (viii) An allowance allocated by the EPA Administrator under the ARP does not constitute a property right.

D. NO_x Emission Requirements

(i) The owners and operators of the source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for NO_x under 40 CFR Part 76.

- E. Excess emissions requirements for SO₂ and NO_x.
 - (i) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77.
 - (ii) If an affected source has excess emissions in any calendar year shall, as required by 40 CFR Part 77:
 - (1) Pay, without demand, the penalty required and pay, upon demand, the interest on that penalty.
 - (2) Comply with the terms of an approved offset plan.
- F. Recordkeeping and Reporting Requirements
 - (i) Unless otherwise provided, the owners and operators of the affected source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the EPA Administrator.
 - representative for the source and each affected unit and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR § 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative.
 - (2) All emissions monitoring information, in accordance with 40 CFR Part 75, provided that to the extent that 40 CFR Part 75 provides for a 3-year period for recordkeeping (rather than a five-year period cited in 30 TAC § 122.144), the 3-year period shall apply.
 - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the ARP or relied upon for compliance certification.
 - (4) Copies of all documents used to complete an acid rain permit application and any other submission under the ARP or to demonstrate compliance with the requirements of the ARP.

(ii) The designated representative of an affected source and each affected unit at the source shall submit the reports required under the ARP including those under 40 CFR Part 72, Subpart I and 40 CFR Part 75.

G. Liability

- (i) Any person who knowingly violates any requirement or prohibition of the ARP, a complete acid rain permit application, an acid rain permit, or a written exemption under 40 CFR §§ 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to FCAA § 113(c).
- (ii) Any person who knowingly makes a false, material statement in any record, submission, or report under the ARP shall be subject to criminal enforcement pursuant to FCAA § 113(c) and 18 U.S.C. 1001.
- (iii) No permit revision shall excuse any violation of the requirements of the ARP that occurs prior to the date that the revision takes effect.
- (iv) The affected source and each affected unit shall meet the requirements of the ARP contained in 40 CFR Parts 72 through 78.
- (v) Any provision of the ARP that applies to an affected source or the designated representative of an affected source shall also apply to the owners and operators of such source and of the affected units at the source.
- (vi) Any provision of the ARP that applies to an affected unit (including a provision applicable to the DR of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR § 72.44 (Phase II repowering extension plans) and 40 CFR § 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR Part 75 (including 40 CFR §§ 75.16, 75.17, and 75.18), the owners and operators and the DR of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the DR and that is located at a source of which they are not owners or operators or the DR.
- (vii) Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or DR of such source or unit, shall be a separate violation of the FCAA Amendments.

- H. Effect on other authorities. No provision of the ARP, an acid rain permit application, an acid rain permit, or an exemption under 40 CFR §§ 72.7 or 72.8 shall be construed as:
 - (i) Except as expressly provided in Title IV of the FCAA Amendments, exempting or excluding the owners and operators and, to the extent applicable, the DR of an affected source or affected unit from compliance with any other provision of the FCAA Amendments, including the provisions of Title I of the FCAA Amendments relating to applicable National Ambient Air Quality Standards or State Implementation Plans.
 - (ii) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the FCAA Amendments.
 - (iii) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law.
 - (iv) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
 - (v) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.
- I. The number of SO₂ allowances allocated by the EPA in 40 CFR Part 73 is enforceable only by the EPA Administrator.

Clean Air Interstate Rule Permit Requirements

18. For units CTG-1A and CTG-1B, located at the affected source identified by ORIS/Facility code 55168, the designated representative and the owner or operator, as applicable, shall comply with the following Clean Air Interstate Rule (CAIR) Permit requirements. Until approval of the Texas CAIR SIP by EPA, the permit holder shall comply with the equivalent requirements of 40 CFR Part 97 in place of the referenced 40 CFR Part 96 requirements in the Texas CAIR permit and 30 TAC Chapter 122 requirements.

A. General Requirements

(i) Under 30 TAC § 122.420(b) and 40 CFR §§ 96.120(b) and 96.220(b) the CAIR Permit requirements contained here are a separable portion of the Federal Operating Permit (FOP).

- (ii) The owners and operators of the CAIR NO_x and the CAIR SO_2 source shall operate the source and the unit in compliance with the requirements of this CAIR permit and all other applicable State and federal requirements.
- (iii) The owners and operators of the CAIR NO_x and the CAIR SO_2 source shall comply with the General Terms and Conditions of the FOP that incorporates this CAIR Permit.
- (iv) The term for the initial CAIR permit shall commence with the issuance of the revision containing the CAIR permit and shall be the remaining term for the FOP that incorporates the CAIR permit. Renewal of the initial CAIR permit shall coincide with the renewal of the FOP that incorporates the CAIR permit and subsequent terms shall be no more than five years from the date of renewal of the FOP and run concurrent with the permit term of the FOP.

B. Monitoring and Reporting Requirements

- (i) The owners and operators, and the CAIR designated representative, of the CAIR NO_x source and each CAIR NO_x unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements contained 40 CFR Part 96, Subpart HH.
- (ii) The owners and operators, and the CAIR designated representative, of the CAIR SO₂ source and each CAIR SO₂ unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements contained 40 CFR Part 96, Subpart HHH.
- (iii) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HH and any other credible evidence shall be used to determine compliance by the CAIR NO_x source with the CAIR NO_x emissions limitation.
- (iv) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHH and any other credible evidence shall be used to determine compliance by the CAIR SO₂ source with the CAIR SO₂ emissions limitation.

C. NO_x emissions requirements

(i) As of the allowance transfer deadline for a control period, the owners and operators of the CAIR NO_x source and each CAIR NO_x unit at the source shall hold, in the source's compliance account, CAIR NO_x allowances available for compliance deductions for the control period under 40 CFR § 96.154(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period

- from all CAIR NO_x units at the source, as determined in accordance with the requirements of 40 CFR Part 96, Subpart HH.
- (ii) A CAIR NO_x unit shall be subject to the requirements of paragraph C.(i) of this CAIR Permit starting on the later of January 1, 2009, or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 96.170(b)(1), (2), or (5).
- (iii) A CAIR NO_x allowance shall not be deducted, for compliance with the requirements of this permit, for a control period in a calendar year before the year for which the CAIR NO_x allowance was allocated.
- (iv) CAIR NO_x allowances shall be held in, deducted from or transferred into or among CAIR NO_x Allowance Tracking System accounts in accordance with the requirements of 40 CFR Part 96, Subpart FF or Subpart GG.
- (v) A CAIR NO_x allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Annual Trading Program. No provision of the CAIR NO_x Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 40 CFR § 96.105 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.
- (vi) A CAIR NO_x allowance does not constitute a property right.
- (vii) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FF or Subpart GG, every allocation, transfer, or deduction of a CAIR NO_x allowance to or from a CAIR NO_x unit's compliance account is incorporated automatically in this CAIR permit.

D. NO_x excess emissions requirement

- (i) If a CAIR NO_x source emits nitrogen oxides during any control period in excess of the CAIR NO_x emissions limitation, the owners and operators of the source and each CAIR NO_x unit at the source shall surrender the CAIR NO_x allowances required for deduction under 40 CFR § 96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law.
- (ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AA, the Clean Air Act, and applicable State law.

E. SO_2 emissions requirements

- (i) As of the allowance transfer deadline for a control period, the owners and operators of the CAIR SO₂ source and each CAIR SO₂ unit at the source shall hold, in the source's compliance account, CAIR SO₂ allowances available for compliance deductions for the control period under 40 CFR § 96.254(a) and (b) in an amount not less than the tons of total sulfur dioxides emissions for the control period from all CAIR SO₂ units at the source, as determined in accordance with the requirements of 40 CFR Part 96, Subpart HHH.
- (ii) A CAIR SO₂ unit shall be subject to the requirements of paragraph E.(i) of this CAIR Permit starting on the later of January 1, 2010, or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 96.270(b)(1), (2), or (5).
- (iii) A CAIR SO₂ allowance shall not be deducted, for compliance with the requirements of this permit, for a control period in a calendar year before the year for which the CAIR SO₂ allowance was allocated.
- (iv) CAIR SO₂ allowances shall be held in, deducted from, or transferred into or among CAIR SO₂ Allowance Tracking System accounts in accordance with the requirements of 40 CFR Part 96, Subpart FFF or Subpart GGG.
- (v) A CAIR SO₂ allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO₂ Trading Program. No provision of the CAIR SO₂ Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 40 CFR § 96.205 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.
- (vi) A CAIR SO₂ allowance does not constitute a property right.
- (vii) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FFF or Subpart GGG, every allocation, transfer, or deduction of a CAIR SO₂ allowance to or from a CAIR SO₂ unit's compliance account is incorporated automatically in this CAIR permit.

F. SO₂ excess emissions requirements

(i) If a CAIR SO₂ source emits sulfur dioxides during any control period in excess of the CAIR SO₂ emissions limitation, the owners and operators of the source and each CAIR SO₂ unit at the source shall surrender the CAIR SO₂ allowances required for deduction under 40 CFR § 96.254(d)(1) and pay any fine, penalty, or

- assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law.
- (ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAA, the Clean Air Act, and applicable State law.

G. Recordkeeping and Reporting Requirements

- (i) Unless otherwise provided, the owners and operators of the CAIR NO_x source and each CAIR NO_x unit at the source and the CAIR SO₂ source and each CAIR SO₂ unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the Administrator.
 - (1) The certificate of representation under 40 CFR §§ 96.113 and 96.213 for the CAIR NO_x designated representative for the source and each CAIR NO_x unit and the CAIR SO₂ designated representative for the source and each CAIR SO₂ unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5 year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR §§ 96.113 and 96.213 changing the CAIR designated representative.
 - (2) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HH and Subpart HHH, provided that to the extent that these subparts provide for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_x Annual Trading Program and CAIR SO₂ Trading Program or relied upon for compliance determinations.
 - (4) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_x Annual Trading Program and CAIR SO₂ Trading Program or to demonstrate compliance with the requirements of the CAIR NO_x Annual Trading Program and CAIR SO₂ Trading Program.
- (ii) The CAIR designated representative of a CAIR NO_x source and each CAIR NO_x unit at the source and a CAIR SO₂ source and each CAIR

SO₂ unit at the source shall submit the reports required under the CAIR NO_x Annual Trading Program and the CAIR SO₂ Trading Program including those under 40 CFR Part 96, Subpart HH and Subpart HHH.

- H. The CAIR NO_x source and each CAIR NO_x unit shall meet the requirements of the CAIR NO_x Annual Trading Program contained in 40 CFR Part 96, Subparts AA through II.
- I. The CAIR SO₂ source and each CAIR SO₂ unit shall meet the requirements of the CAIR SO₂ Trading Program contained in 40 CFR Part 96, Subparts AAA through III.
- J. Any provision of the CAIR NO_x Annual Trading Program and the CAIR SO₂ Trading Program that applies to a CAIR NO_x source or CAIR SO₂ source or the CAIR designated representative of a CAIR NO_x source or CAIR SO₂ source shall also apply to the owners and operators of such source and the units at the source.
- K. Any provision of the CAIR NO_x Annual Trading Program and the CAIR SO₂ Trading Program that applies to a CAIR NO_x unit or CAIR SO₂ unit or the CAIR designated representative of a CAIR NO_x unit or CAIR SO₂ unit shall also apply to the owners and operators of such unit.
- L. No provision of the CAIR NO_x Annual Trading Program, CAIR SO₂ Trading Program, a CAIR permit application, a CAIR permit, or an exemption under 40 CFR §§ 96.105 or 96.205 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x source or CAIR NO_x unit or a CAIR SO₂ source or CAIR SO₂ unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Applicable Requirements Summary

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Note: A "none" entry may be noted for some emission sources in this permit's "Applicable Requirements Summary" under the heading of "Monitoring and Testing Requirements" and/or "Recordkeeping Requirements" and/or "Reporting Requirements." Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
FWP-1	SRIC ENGINES	N/A	63ZZZZ-1	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GRP-CTOWER	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	CTOWER-1, CTOWER2	R111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
GRPHRSG	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	CTG-1A, CTG-1B	60DA	40 CFR Part 60, Subpart Da	No changing attributes.
GRPSTACK	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	CTG-1A, CTG-1B	R111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
GRPTURBINE	STATIONARY TURBINES	CTG-1A, CTG-1B	60GG	40 CFR Part 60, Subpart GG	No changing attributes.

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FWP-1	EU	63ZZZZ-1	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	\$ 63.6603(a)- Table2d.4 \$ 63.6595(a)(1) \$ 63.6605(a) \$ 63.6605(b) \$ 63.6625(e) \$ 63.6625(h) \$ 63.6625(i) \$ 63.6640(b) \$ 63.6640(f)(1) [G]§ 63.6640(f)(2) [G]§ 63.6640(f)(4)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c.	\$ 63.6625(f) \$ 63.6625(i) \$ 63.6640(a) \$ 63.6640(a)- Table6.9.a.i \$ 63.6640(a)- Table6.9.a.ii \$ 63.6640(b)	\$ 63.6625(i) \$ 63.6655(a) \$ 63.6655(d) \$ 63.6655(d) \$ 63.6655(e) \$ 63.6655(f) \$ 63.6660(a) \$ 63.6660(b) \$ 63.6660(c)	§ 63.6640(b) § 63.6640(e) § 63.6650(f)
GRP- CTOWER	ЕР	R111	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
GRPHRSG	EU	60DA	SO2	40 CFR Part 60, Subpart Da	§ 60.43Da(b)(2) § 60.43Da(g) § 60.48Da(a) § 60.48Da(c)	On/after the §60.8 test, no gases shall be discharged into the atmosphere containing SO2 in excess of 100% of the potential combustion concentration when emissions are <86ng/J heat input.	§ 60.48Da(c) § 60.50Da(a) § 60.50Da(c)(4) § 60.50Da(f) ** See Periodic Monitoring Summary	None	[G]§ 60.48Da(s) § 60.48Da(c) § 60.51Da(a)
GRPHRSG	EU	60DA	NOX	40 CFR Part 60, Subpart Da	§ 60.44Da(d)(1) § 60.48Da(a) § 60.48Da(c)	New sources commencing construction after July 9, 1997 shall not emis nitrogen oxides (expressed as NO2) in excess of 200 ng/J (1.6 lb/MW-hr) gross energy output, based on a 30-day rolling average.	[G]§ 60.48Da(k)(1) [G]§ 60.48Da(k)(3) § 60.48Da(c) § 60.48Da(k) § 60.50Da(a) § 60.50Da(d)(1) § 60.50Da(f) *** See Periodic Monitoring	None	[G]§ 60.48Da(s) § 60.48Da(c) § 60.51Da(a)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							Summary		
GRPSTACK	ЕР	R111	PM (OPACITY)	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
GRPTURBI NE	EU	60GG	SO2	40 CFR Part 60, Subpart GG	§ 60.333(b)	No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight.	§ 60.334(h) § 60.334(h)(4)	None	None
GRPTURBI NE	EU	60GG	NOX	40 CFR Part 60, Subpart GG	§ 60.332(a)(1) § 60.332(a)(3)	No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation.	§ 60.334(c) ** See Periodic Monitoring Summary	§ 60.334(c)	§ 60.334(j)

	Additional Mon	nitoring Requ	iirements	
Periodic Monitori	ng Summary	•••••	•••••	29

Unit/Group/Process Information					
ID No.: GRP-CTOWER					
Control Device ID No.: N/A Control Device Type: N/A					
Applicable Regulatory Requirement					
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R111				
Pollutant: PM (OPACITY) Main Standard: § 111.111(a)(1)(C)					
Monitoring Information					
Indicator: Opacity					
Minimum Frequency: Quarterly					
Averaging Period: Six minutes					

Deviation Limit: Maximum opacity of 15% except during periods defined in 30 TAC §111.111(a)(1)(E).

Periodic Monitoring Text: Visible emissions observations shall be made and recorded at least once during each calendar quarter unless the emission unit venting to this emission point does not operate during the quarter. Records of all observations shall be maintained.

Visible emissions observations shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations shall be made during times when the activities described in 30 TAC §111.111(a)(1)(E) are not occurring. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile away from each stationary vent during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

If visible emissions are not present during the observation, the RO may certify that the source is in compliance. However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report, as required under 30 TAC 122.145(2), or conduct the appropriate opacity test specified in 30 TAC §111.111(a)(1)(F) to determine if the source is in compliance with opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC §122.145(2). The opacity test must be performed by a certified opacity reader

Un	it/G	roup/	Process 1	Info	rmatio	on

ID No.: GRPHRSG

Control Device ID No.: N/A Control Device Type: N/A

Applicable Regulatory Requirement

Name: 40 CFR Part 60, Subpart Da SOP Index No.: 60DA

Pollutant: SO2 Main Standard: § 60.43Da(b)(2)

Monitoring Information

Indicator: Natural Gas Sulfur Content

Minimum Frequency: Semi-annually

Averaging Period: n/a

Deviation Limit: 0.23% Sulfur Content in fuel

Periodic Monitoring Text: Conduct fuel sampling using the methods and procedures of the Custom Fuel Monitoring Schedule (CFMS) dated September 12, 2002 or any subsequent approved CFMS. The SO2 limits shall be based on 100 % conversion of the sulfur in the fuel to SO2. If a sulfur content is greater than 0.23% (equivalent to 0.20 lb SO2/MMBtu), the permit holder shall report a deviation.

Unit/Group/Process Information						
ID No.: GRPHRSG						
Control Device ID No.: N/A	Control Device Type: N/A					
Applicable Regulatory Requirement						
Name: 40 CFR Part 60, Subpart Da	SOP Index No.: 60DA					
Pollutant: NOX	Main Standard: § 60.44Da(d)(1)					
Monitoring Information						
Indicator: NOx concentration	Indicator: NOx concentration					
Minimum Frequency: Four times per hour						
Averaging Period: One hour						
Deviation Limit: Maximum emissions of 1.6 lb NOx/MWh calculated as specified in the periodic monitoring text.						

Periodic Monitoring Text: The continuous emissions monitoring system (CEMS) specified in 41941 / PSD Permit No. PSDTX948 shall be used to monitor compliance with the NOx emission limit. The CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and data analysis requirements specified in the appropriate performance specifications in 40 CFR Part 75. NOx emissions shall be corrected/calculated in units of the underlying applicable emission limitation (lb/MWh).

The emission rate (in lb/MWh) for each duct burner shall be calculated as described below for each rolling period of 30 duct burner operating days. A duct burner operating day is defined as a calendar day during which the duct burner is fired. The emission rate shall be calculated as the average of the emissions recorded by the CEMS for all clock-hours during which the duct burner was fired over the previous 30 duct burner operating days, excluding clock-hours during which the associated combustion turbine is operated in maintenance, start-up, or shutdown (MSS) mode (as defined in NSR Permit No. 41941 / PSD Permit No. PSDTX948). Specifically, the emission rate is calculated as the sum of the NOx CEMS emission measurements (in lbs) for the clock-hours described above for the duct burner plus its associated combustion turbine, divided by the sum of the gross electrical output (in MWh) of the associated HRSG and combustion turbine combined for the same clock-hours.

The gross electrical output apportioned to the HRSG shall be calculated as:

- 1) The gross electrical output of the associated steam turbine, multiplied by
- 2) The total heat input to the combined cycle unit to which the HRSG belongs (i.e. the heat input to the duct burner plus the heat input to its associated combustion turbine), then divided by
- 3) The sum of total heat input to both combined cycle units associated with the steam turbine.

Unit/G	roup/Process	Information
ID No.:	GRPSTACK	

Control Device ID No.: N/A Control Device Type: N/A

Applicable Regulatory Requirement

Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R111

Pollutant: PM (OPACITY) | Main Standard: § 111.111(a)(1)(C)

Monitoring Information

Indicator: Fuel Type

Minimum Frequency: Annually or at any time an alternate fuel is used

Averaging Period: n/a

Deviation Limit: 15% Opacity

Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, for a period greater than or equal to 24 consecutive hours it shall be considered and reported as a deviation or the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are observed. Any time an alternate fuel is fired for a period of greater than 7 consecutive days then visible emissions observations will be conducted no less than once per week. Documentation of all observations shall be maintained. If visible emissions are present during the firing of an alternate fuel, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.

Unit/Group/Process Information					
ID No.: GRPTURBINE					
Control Device ID No.: N/A	Control Device Type: N/A				
Applicable Regulatory Requirement					
Name: 40 CFR Part 60, Subpart GG	SOP Index No.: 60GG				
Pollutant: NOX	Main Standard: § 60.332(a)(1)				
Monitoring Information					
Indicator: NOx Concentration					
Minimum Frequency: Four times per hour					
Averaging Period: Four hour (rolling basis)					

Deviation Limit: A four-hour average value of NOx concentration greater than 109 ppmv at 15% O2.

Periodic Monitoring Text: The continuous monitoring system (CEMS) specified in 41941/PSD Permit No. PSDTX948 shall be used to monitor compliance with the NOx emission limit. The CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and data analysis requirements specified in the appropriate performance specifications in 40 CFR Part 75.

	Permit Shield
Permit Shield	

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Gr	oup/Process	Regulation	Basis of Determination	
ID No.	Group/Inclusive Units			
CONDNSTLDG	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	Bastrop County is exempt from the requirements of this regulation	
CONDTK-1	N/A	40 CFR Part 60, Subpart Kb	The storage tanks have less than 10,600 gallon storage capacity.	
DIESELULDG	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	Bastrop County is exempt from the requirements of this regulation	
FWP-1	N/A	40 CFR Part 60, Subpart IIII	the engine was manufactured before April 1, 2006 and is not subject to any provisions of § 60.4208 because it was installed before December 31, 2008	
GRP-CTOWER	CTOWER-1, CTOWER2	40 CFR Part 63, Subpart Q	Cooling towers do not use chromium- based water treatment chemicals and are not major sources of HAPs, or located at a facility that is a major source of HAPs	
GRPDIESELTK	TANK-1, TANK-3	40 CFR Part 60, Subpart Kb	The storage tank has less than 19,800 gallon storage capacity.	
GRPHRSG	CTG-1A, CTG-1B	40 CFR Part 63, Subpart DDDDD	The units are not located at a major source of HAPs.	
GRPHRSG	CTG-1A, CTG-1B	40 CFR Part 63, Subpart JJJJJJ	The duct burners are components of waste heat boilers and are therefore excluded from the definition of a boiler in 40 CFR Part 63, Subpart JJJJJJ	

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/	Group/Process	Regulation	Basis of Determination	
ID No.	Group/Inclusive Units			
GRPLUBETNK	CTG-1ALUBE, CTG- 1BLUBE, TOSHIBA	40 CFR Part 60, Subpart Kb	The units are process tanks and therefore are excluded from the definition of a storage vessel in 40 CFR Part 60, subpart Kb	
GRPTURBINE	CTG-1A, CTG-1B	40 CFR Part 60, Subpart KKKK	The combustion turbines were constructed prior to February 18, 2005.	
GRPTURBINE	CTG-1A, CTG-1B	40 CFR Part 63, Subpart YYYY	The site is not a major source of HAPS	
GRP-WTTKS	WTTKBL1547, WTTKCL4800	40 CFR Part 60, Subpart Kb	The storage tanks have capacities of less than 75 cubic meters	
LOADING	N/A	40 CFR Part 60, Subpart Kb	The site is located in Bastrop County	
OILWATSEP	N/A	40 CFR Part 60, Subpart Kb	The units are process tanks and therefore are excluded from the definition of a storage vessel in Part 60, Subpart Kb	
PAINTING	N/A	40 CFR Part 63, Subpart HHHHHH	Only facility maintenance is performed onsite and Methylene Chloride is not used for paint stripping	
PAINTING	N/A	40 CFR Part 63, Subpart MMMM	The site is not a major source of hazardous air pollutants	
USEDOILLDG	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	Bastrop County is exempt from the requirements of this regulation	
WASHER1	N/A	30 TAC Chapter 115, Degreasing Processes	A remote reservoir cold solvent cleaner	

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No. Group/Inclusive Units			
			which uses solvent with a true vp = or < 0.6 psia at 100°F and which has a drain area less than 16 inches square and for which waste solvent is properly disposed of in enclosed containers is exempt
WASHER1	N/A	40 CFR Part 63, Subpart T	The parts washer solvent contains less than 5% hazardous air pollutants.

New Source Review Authorization References	
New Source Review Authorization References	39
New Source Review Authorization References by Emission Unit	.40

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Prevention of Significant Deterioration (PSD) Permits					
PSD Permit No.: PSDTX948	Issuance Date: 04/05/2011				
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.					
Authorization No.: 41941	Issuance Date: 04/05/2011				
Permits By Rule (30 TAC Chapter 10	6) for the Application Area				
Number: 106.102	Version No./Date: 09/04/2000				
Number: 106.103	Version No./Date: 09/04/2000				
Number: 106.104	Version No./Date: 09/04/2000				
Number: 106.122	Version No./Date: 09/04/2000				
Number: 106.227	Version No./Date: 09/04/2000				
Number: 106.242	Version No./Date: 09/04/2000				
Number: 106.261	Version No./Date: 09/04/2000				
Number: 106.261	Version No./Date: 11/01/2003				
Number: 106.262	Version No./Date: 11/01/2003				
Number: 106.263	Version No./Date: 03/14/1997				
Number: 106.263	Version No./Date: 11/01/2001				
Number: 106.265	Version No./Date: 09/04/2000				
Number: 106.371	Version No./Date: 09/04/2000				
Number: 106.454	Version No./Date: 09/04/2000				
Number: 106.454	Version No./Date: 11/01/2001				
Number: 106.471	Version No./Date: 09/04/2000				
Number: 106.472	Version No./Date: 09/04/2000				
Number: 106.511	Version No./Date: 09/04/2000				
Number: 106.532	Version No./Date: 09/04/2000				

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
CONDNSTLDG	TRUCK LOADING OF NATURAL GAS CONDENSATE	41941, PSDTX948
CONDTK-1	MAIN CONDENSATE STORAGE TANK	41941, PSDTX948
CTG-1A	GE-7FA TURBINE 1A	41941, 106.261/11/01/2003, PSDTX948
CTG-1A	HEAT RECOVERY STEAM GEN 1A	41941, PSDTX948
CTG-1ALUBE	LUBE OIL TANK FOR COMBUSTION TURBINE 1A	41941, PSDTX948
CTG-1A	TURBINE/HRSG STACK 1A	41941, PSDTX948
CTG-1B	GE-7A TURBINE 1B	41941, 106.261/11/01/2003, 106.262/11/01/2003, PSDTX948
CTG-1B	HEAT RECOVERY STEAM GEN 1B	41941, PSDTX948
CTG-1BLUBE	LUBE OIL TANK FOR COMBUSTION TURBINE 1B	41941, PSDTX948
CTG-1B	TURBINE/HRSG STACK 1B	41941, PSDTX948
CTOWER-1	COOLING TOWER 1	41941, PSDTX948
CTOWER2	COOLING TOWER 2TIAC SYSTEMS	106.371/09/04/2000
DIESELULDG	TRUCK UNLOADING OF DIESEL FUEL	41941, 106.472/09/04/2000, PSDTX948
FWP-1	FIRE WATER PUMP ENGINE	41941, PSDTX948
LOADING	GENERAL VOC LOADING AND UNLOADING OPERATIONS	106.104.472/09/04/2000, 106.104.473/09/04/2000
OILWATSEP	OIL WATER SEPARATOR	106.532/09/04/2000

New Source Review Authorization References by Emissions Unit

The following is a list of New Source Review (NSR) authorizations for emission units listed elsewhere in this operating permit. The NSR authorizations are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
PAINTING	MAINTENANCE PAINTING OF SITE EQUIPMENT	106.263/11/01/2001
TANK-1	DIESEL TANK	41941, PSDTX948
TANK-3	DIESEL STORAGE TANK FOR ON-SITE MOTOR VEHICLES	106.472/09/04/2000
TOSHIBA	LUBE OIL TANK FOR STEAM TURBINE 1	41941, PSDTX948
USEDOILLDG	TRUCK LOADING OF USED LUBE OIL	106.472/09/04/2000
WASHER1	SOLVENT PART WASHER	106.454/09/04/2000
WTTKBL1547	STORAGE TANK FOR CHEMTREAT BL1547	106.371/09/04/2000
WTTKCL4800	STORAGE TANK FOR CHEMTREAT QUADRASPERSE CL 4800	106.371/09/04/2000

	Appendix A	
Acronym List		43

Acronym List

The following abbreviations or acronyms may be used in this permit:

ACEM	actual cubic feet per minute
	Acid Rain Program
	Beaumont/Port Arthur (nonattainment area)
CAM	
CD	control device
COMS	continuous opacity monitoring system
CVS	closed-vent system
	Dallas/Fort Worth (nonattainment area)
	El Paso (nonattainment area)
EP	emission point
	U.S. Environmental Protection Agency
	emission unit
FCAA Amendments	Federal Clean Air Act Amendments
FOP	federal operating permit
GF	grandfathered
gr/100 scf	grains per 100 standard cubic feet
HAP	hazardous air pollutant
H/G/B	Houston/Galveston/Brazoria (nonattainment area)
	hydrogen sulfide
	identification number
	pound(s) per hour
MMBtu/hr	
	monitoring, recordkeeping, reporting, and testing
	nonattainment
	not applicable
	National Allowance Data Base
	nitrogen oxides
NSPS	New Source Performance Standard (40 CFR Part 60)
NSR	
ORIS	Office of Regulatory Information Systems
	lead
	Permit By Rule
	particulate matterparticulate matterparts per million by volume
bbut	parts per inition by volumeprevention of significant deterioration
	Texas Commission on Environmental Quality
	total suspended particulate
	true vapor pressure
VOC	volatile organic compound

	Appendix B			
Major NSR Summary Table	•••••	•••••	•••••	4 5
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Major NSR Summary Table

			NSR F	Permit 41941/	PSDTX948, Issued 04/05/2011		
	Emission Limits Permit Special Conditions						
EPN (1)	Source Name (2)	Pollutant (3)	lb/hr	tpy (4)	Monitoring/ Testing	Recordkeeping	Reporting
				•	Combined Cycle Gas Tur	bine Only Operation	
		NOx	64.00	-	3, 8, 11, 15, 17, 18, 19, 20	3, 11, 15, 17, 18, 19, 20, 26, 27	3, 17, 18, 28, 30
		СО	32.00	-	8, 11, 17, 18, 19, 20	11, 17, 18, 19, 20, 26, 27	17, 18, 28, 30
	GE-7FA Turbine 1A (PG7241[FA])	voc	3.00	-	8, 11, 17, 20	11, 17, 20, 26, 27	17
	(1 372 12[174])	PM/PM ₁₀ /PM _{2.5}	13.20	-	8, 11, 15, 17, 20	11, 15, 17, 20, 26, 27	17
		SO ₂	27.17	-	3, 8, 11, 17, 20, 21	3, 11, 17, 20, 21, 26, 27	3, 17
		H ₂ SO ₄	3.33	-	8, 11, 15, 17, 20, 21	11, 15, 17, 20, 21, 26, 27	17
		Combined Cycle Gas Turbine MSS Operations					
		NOx	275.00	-	8, 11, 15, 18, 19, 20	11, 15, 18, 19, 20, 23, 27	18, 28, 30
		со	2890.00	-	8, 11, 18, 19, 20	11, 18, 19, 20, 23, 27	18, 28, 30
STACK1	GE-7FA Turbine 1A (PG7241[FA])	VOC	183.00	-	8, 11, 20	11, 20, 23, 27	
		PM/PM ₁₀ /PM _{2.5}	18.00	-	8, 11, 15, 20	11, 15, 20, 23, 27	
		SO ₂	15.40	-	8, 11, 20, 21	11, 20, 21, 23, 27	
		H ₂ SO ₄	1.89	-	8, 11, 15, 20, 21	11, 15, 20, 21, 23, 27	
					Combine Cycle Gas Turbine	with HRSG Duct Burner	
		NOx	88.00	-	3, 8, 11, 15, 17, 18, 19, 20	3, 11, 15, 17, 18, 19, 20, 26, 27	3, 17, 18, 28, 30
	GE-7FA Turbine 1A	СО	62.00	-	8, 11, 17, 18, 19, 20	11, 17, 18, 19, 20, 26, 27	17, 18, 28, 30
	(PG7241[FA]) with 300 MMBtu/hr Duct	VOC	4.70	-	8, 11, 17, 20	11, 17, 20, 26, 27	17
	Burner	PM/PM ₁₀ /PM _{2.5}	16.20	-	8, 11, 15, 17, 20	11, 15, 17, 20, 26, 27	17
		SO ₂	31.50	-	3, 8, 11, 17, 20, 21	3, 11, 17, 20, 21, 26, 27	3, 17
		H ₂ SO ₄	3.85	-	8, 11, 15, 17, 20, 21	11, 15, 17, 20, 21, 26, 27	17
STACK2	GE-7FA Turbine 1B				Combined Cycle Gas Tur	bine Only Operation	
JIMUNZ	(PG7241[FA])	NOx	64.00	-	3, 8, 11, 15, 17, 18, 19, 20	3, 11, 15, 17, 18, 19, 20, 26, 27	3, 17, 18, 28, 30

			NSR F	Permit 41941/	PSDTX948, Issued 04/05/2011		
			Emission	n Limits		Permit Special Conditions	
EPN (1)	Source Name (2)	Pollutant (3)	lb/hr	tpy (4)	Monitoring/ Testing	Recordkeeping	Reporting
		СО	32.00	-	8, 11, 17, 18, 19, 20	11, 17, 18, 19, 20, 26, 27	17, 18, 28, 30
		VOC	3.00	-	8, 11, 17, 20	11, 17, 20, 26, 27	17
		PM/PM ₁₀ /PM _{2.5}	13.20	-	8, 11, 15, 17, 20	11, 15, 17, 20, 26, 27	17
		SO ₂	27.17	-	3, 8, 11, 17, 20, 21	3, 11, 17, 20, 21, 26, 27	3, 17
		H ₂ SO ₄	3.33	-	8, 11, 15, 17, 20, 21	11, 15, 17, 20, 21, 26, 27	17
					Combined Cycle Gas Tur	bine MSS Operations	
		NOx	275.00	-	8, 11, 15, 18, 19, 20	11, 15, 18, 19, 20, 23, 27	18, 28, 30
		СО	2890.00	-	8, 11, 18, 19, 20	11, 18, 19, 20, 23, 27	18, 28, 30
	GE-7FA Turbine 1B(PG7241[FA])	VOC	183.00	-	8, 11, 20	11, 20, 23, 27	
	, , , , , , , , , , , , , , , , , , , ,	PM/PM ₁₀ /PM _{2.5}	18.00	-	8, 11, 15, 20	11, 15, 20, 23, 27	
		SO ₂	15.40	-	8, 11, 20, 21	11, 20, 21, 23, 27	
		H ₂ SO ₄	1.89	-	8, 11, 15, 20, 21	11, 15, 20, 21, 23, 27	
					Combine Cycle Gas Turbine	with HRSG Duct Burner	
		NOx	88.00	-	3, 8, 11, 15, 17, 18, 19, 20	3, 11, 15, 17, 18, 19, 20, 26, 27	3, 17, 18, 28, 30
	GE-7FA Turbine 1B	со	62.00	-	8, 11, 17, 18, 19, 20	11, 17, 18, 19, 20, 26, 27	17, 18, 28, 30
	(PG7241[FA]) with 300 MMBtu/hr Duct	VOC	4.70	-	8, 11, 17, 20	11, 17, 20, 26, 27	17
	Burner	PM/PM ₁₀ /PM _{2.5}	16.20	-	8, 11, 15, 17, 20	11, 15, 17, 20, 26, 27	17
		SO ₂	31.50	-	3, 8, 11, 17, 20, 21	3, 11, 17, 20, 21, 26, 27	3, 17
		H ₂ SO ₄	3.85	-	8, 11, 15, 17, 20, 21	11, 15, 17, 20, 21, 26, 27	17
		NOx	-	604.08	8, 11, 17, 18, 19, 20	11, 17, 18, 20, 26, 27	17, 18, 28, 30
GE-7FA Turbine 1A (PG7241[FA]) with 30 STACK1 and MMBtu/hr Duct Burn		со	-	416.50	8, 11, 17, 18, 19, 20	11, 17, 18, 20, 26, 27	17, 18, 28, 30
	MMBtu/hr Duct Burner	VOC	-	39.26	8, 11, 17, 20	11, 17, 20, 26, 27	17
STACK2	and GE-7FA Turbine 1B (PG7241[FA]) with 300	PM/PM ₁₀ /PM _{2.5}	-	129.69	8, 11, 17, 20	11, 17, 20, 26, 27	17
	MMBtu/hr Duct Burner	SO ₂	-	36.42	8, 11, 17, 20, 21	11, 17, 20, 21, 26, 27	17
		H ₂ SO ₄	-	4.46	8, 11, 17, 20, 21	11, 17, 20, 21, 26, 27	17

NSR Permit 41941/PSDTX948, Issued 04/05/2011								
			Emissio	n Limits		Permit Special Conditions		
EPN (1)	Source Name (2)	Pollutant (3)	lb/hr	tpy (4)	Monitoring/ Testing	Recordkeeping	Reporting	
CTG1A-OV	Turbine 1A Oil Mist Vent	VOC	0.03	0.13				
CIGIA-OV	(5)	PM/PM ₁₀ /PM _{2.5}	0.03	0.13				
CTG1B-OV	Turbine 1B Oil Mist Vent	VOC	0.03	0.13				
CIGIB-OV	(5)	PM/PM ₁₀ /PM _{2.5}	0.03	0.13				
TOSHIBA	Steam Turbine Oil Mist	voc	0.03	0.13				
TOSTIIDA	Vent	PM/PM ₁₀ /PM _{2.5}	0.03	0.13				
	Firewater Pump Engine (6)	NOx	1.74	0.1	9, 11	9, 10, 11, 27		
		со	0.16	0.01	9, 11	9, 10, 11, 27		
FWP-1		VOC	0.1	0.01	9, 11	9, 10, 11, 27		
1 441 - 1		PM/PM ₁₀ /PM _{2.5}	0.05	<0.01	9, 11	9, 10, 11, 27		
		SO ₂	0.12	0.01	9, 11	9, 10, 11, 27		
		H ₂ SO ₄	0.02	<0.01	9, 11	9, 10, 11, 27		
TANK-1	Diesel Storage Tank	VOC	0.025	<0.01				
FUG-1	Natural Gas, Condensate	VOC	0.76	3.33				
100-1	and Oil Fugitives (7)	H₂S	<0.01	<0.01				
		PM/PM ₁₀ /PM _{2.5}	2.45	10.72	25	25, 26, 27	25	
		HOCI	0.06	0.28				
CTOWER-1	Cooling Tower 1	HCI	0.04	0.19				
		H ₂ SO ₄	<0.01	<0.01				
		VOC	0.02	0.07				
LOADING	Natural Gas Condensate	VOC	10.86	<0.01				
LOADING	Truck Loading	PM/PM ₁₀ /PM _{2.5}	0.1	<0.01				
SCAVTK1	Hydrogen Scavenging	VOC	0.03	0.13			-	
2CVA LIVI	Tank Vent for Unit 1A	PM/PM ₁₀ /PM _{2.5}	0.03	0.13				
SCAVTK2	Hydrogen Scavenging	voc	0.03	0.13				

	NSR Permit 41941/PSDTX948, Issued 04/05/2011									
	(1) Source Name (2) Pollutant (3)		Emission Limits		Permit Special Conditions					
EPN (1)			lb/hr	tpy (4)	Monitoring/ Testing	Recordkeeping	Reporting			
	Tank Vent for Unit 1B	PM/PM ₁₀ /PM _{2.5}	0.03	0.13						
CONDTK-1	Condensate Storage Tank	VOC	0.09	0.36						
CONDIK-1	No. 1	H ₂ S	<0.01	<0.01						

Foototes:

- (1) Emission point identification either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 - NO_x total oxides of nitrogen
 - SO₂ sulfur dioxide
 - PM total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
 - PM_{10} total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
 - PM_{2.5} particulate matter equal to or less than 2.5 microns in diameter
 - CO carbon monoxide
 - H₂S hydrogen sulfide
 - HCl- hydrochloric acid
 - HOCl- hydrochlorous acid
 - H₂SO₄ sulfuric acid
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Turbine oil mist emissions are an estimate only based on estimates from mist vent eliminator manufacturer's data.
- (6) Emissions are based on normal operation of 120 operating hours per year.
- (7) Fugitive emissions are an estimate based on component count and applicable fugitive emission factors.

Bryan W. Shaw, Ph.D., *Chairman*Buddy Garcia, *Commissioner*Carlos Rubinstein, *Commissioner*Mark R. Vickery, P.G., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 5, 2011

MR MARK ADAMS EHS MANAGER BASTROP ENERGY PARTNERS LP 125 OLD BASTROP RD CEDAR CREEK TX 78612-3040

Re: Permit Alteration

Permit Number: 41941 Bastrop Energy Center

Cedar Creek, Bastrop County

Regulated Entity Number: RN101056851 Customer Reference Number: CN600615470

Account Number: BC-0083-R

Associated Permit Number: PSDTX948

Dear Mr. Adams:

This is in response to your letter received February 8, 2011, requesting alteration of the conditions and maximum allowable emission rates table (MAERT) of the above-referenced permit. We understand that Bastrop Energy Partners, LP wishes to remove a Doosan diesel fired reciprocating engine and its associated crankcase emissions from their permit due to the fact that the engine is not located at the permitted site in Bastrop County. BEP will authorize the engine using TCEQ Permit By Rule 30 TAC 106.511.

As indicated in Title 30 Texas Administrative Code § 116.116(c) [30 TAC § 116.116(c)], and based on our review, Permit Number 41941 is altered. Enclosed are the altered permit conditions and MAERT to replace those currently attached to your permit. Please attach these to your permit.

Planned maintenance, startup, and shutdown emissions have been previously reviewed, authorized, and included in the MAERT. Any other maintenance activities are not authorized by this permit and will need to obtain a separate authorization.

As of July 1, 2008, all analytical data generated by a mobile or stationary laboratory in support of compliance with air permits must be obtained from a NELAC (National Environmental Laboratory Accreditation Conference) accredited laboratory under the Texas Laboratory Accreditation Program or meet one of several exemptions. Specific information concerning

Mr. Mark Adams Page 2 April 5, 2011

Re: Permit Number: 41941

which laboratories must be accredited and which are exempt may be found in 30 TAC § 25.4 and § 25.6.

For additional information regarding the laboratory accreditation program and a list of accredited laboratories and their fields of accreditation, please see the following Web site:

www.tceq.texas.gov/compliance/compliance_support/qa/env_lab_accreditation.html

For questions regarding the accreditation program, you may contact the Texas Laboratory Accreditation Program at (512) 239-3754 or by e-mail at labprgms@tceq.texas.gov.

Your cooperation in this matter is appreciated. If you need further information or have any questions, please contact Mr. Marc Sturdivant at (512) 239-1313 or write to the Texas Commission on Environmental Quality, Office of Permitting and Registration, Air Permits Division, MC-163, P.O. Box 13087, Austin, Texas 78711-3087.

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality.

Sincerely,

Steve Hagle, P.E., Director

Air Permits Division

Office of Permitting and Registration

Hagh

Texas Commission on Environmental Quality

SH/MS/

Enclosure

cc: Air Section Manager, Region 11 - Austin

Air Permits Section Chief, New Source Review, Section (6PD-R), U.S. Environmental Protection Agency, Region 6, Dallas



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY AIR QUALITY PERMIT



A PERMIT IS HEREBY ISSUED TO

Bastrop Energy Partners, L.P.

AUTHORIZING THE CONTINUED OPERATION OF

Bastrop Energy Center

LOCATED AT Cedar Creek, Bastrop County, Texas

LATITUDE 30° 8′ 47″ LONGITUDE 097° 32′ 48″

- 1. Facilities covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code § 116.116 (30 TAC § 116.116)]
- Voiding of Permit. A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1)the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120(a), (b) and (c)]
- 3. Construction Progress. Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
- 4. Start-up Notification. The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify to the Office of Permitting and Registration the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
- 5. Sampling Requirements. If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]
- 6. Equivalency of Methods. The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
- 7. Recordkeeping. The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction; comply with any additional recordkeeping requirements specified in special conditions attached to the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]
- 8. Maximum Allowable Emission Rates. The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)]
- 9. Maintenance of Emission Control. The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification for upsets and maintenance in accordance with §§ 101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC § 116.115(b)(2)(G)]
- 10. Compliance with Rules. Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules, regulations, and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
- 11. This permit may be appealed pursuant to 30 TAC § 50.139.
- 12. This permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
- 13. There may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
- 14. Emissions from this facility must not cause or contribute to a condition of "air pollution" as defined in TCAA § 382.003(3) or violate TCAA § 382.085, as codified in the Texas Health and Safety Code. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.

PERMITS 41941 and PSDTX948

Date: August 19, 2010

For the Commission

Madlilez

Permit Number 41941 and PSDTX948

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

AIR CONTAMINANTS DATA

Emission Doint No. (1)	Source Name (2)	Air Contominant Name (2)	Emission Rates		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	lbs/hour	TPY (4)	
Turbine Only (Hour	y Limits)				
STACK1	GE-7FA Turbine	NO _x	64.0	-	
	1A	CO	32.0	-	
		VOC	3.0	-	
		PM/PM ₁₀ /PM _{2.5}	13.2	-	
		SO_2	27.17	-	
		H ₂ SO ₄	3.33	-	
STACK2	GE-7FA Turbine	NO _x	64.0	-	
	1B	СО	32.0	-	
		VOC	3.0	-	
		PM/PM ₁₀ /PM _{2.5}	13.2	-	
		SO_2	27.17	-	
		H ₂ SO ₄	3.33	-	
Turbine Only (Maint	tenance, Startup, an	d Shutdown)			
STACK1	GE-7FA Turbine	NO _x	275.0	-	
	1A	СО	2890.0	-	
		VOC	183.0	-	
		PM/PM ₁₀ /PM _{2.5}	18.0	-	
		SO_2	15.4	-	
		H ₂ SO ₄	1.89	-	
STACK2	GE-7FA Turbine	NO _x	275.0	-	
	1B	CO	2890.0	-	
		VOC	183.0	-	
		PM/PM ₁₀ /PM _{2.5}	18.0	-	
		SO ₂	15.4	-	
		H ₂ SO ₄	1.89	-	

Emission Doint No. (1)	Sauraa Nama (2)	Air Contominant Name (2)	Emission	n Rates
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	lbs/hour	TPY (4)
Turbine and Duct Bu	urner (Hourly Limits)		
STACK1	GE-7FA Turbine	NO _x	88.0	-
	1A with 300 MM	СО	62.0	_
	Btu/hr Duct Burner	VOC	4.7	-
		PM/PM ₁₀ /PM _{2.5}	16.2	-
		SO_2	31.5	-
		H ₂ SO ₄	3.85	_
STACK2	GE-7FA Turbine	NO _x	88.0	-
	1B with 300 MM	СО	62.0	_
	Btu/hr Duct Burner	VOC	4.7	-
		PM/PM ₁₀ /PM _{2.5}	16.2	-
		SO_2	31.5	-
		H ₂ SO ₄	3.85	_
Turbine and Duct Bu	urner (Annual Limits			
STACK1 and STACK2	GE-7FA Turbine 1A with 300 MM	NO _x	-	604.08
	Btu/hr Duct Burner and GE-7FA Turbine 1B with 300 MM Btu/hr Duct Burner	CO	-	416.5
		VOC	-	39.26
		PM/PM ₁₀ /PM _{2.5}	-	129.69
		SO_2	-	36.42
		H ₂ SO ₄	-	4.46
CTG1A-OV	Turbine 1A Oil	VOC	0.03	0.13
	Mist Vent (5)	PM/PM ₁₀ /PM _{2.5}	0.03	0.13
CTG1B-OV	Turbine 1B Oil	VOC	0.03	0.13
	Mist Vent (5)	PM/PM ₁₀ /PM _{2.5}	0.03	0.13
TOSHIBA	Steam Turbine Oil	VOC	0.03	0.13
	Mist Vent	PM/PM ₁₀ /PM _{2.5}	0.03	0.13
FWP-1	Firewater Pump	NO _x	1.74	0.1
	Engine (6)	CO	0.16	0.01
		VOC	0.1	0.01
		PM/PM ₁₀ /PM _{2.5}	0.05	< 0.01
		SO_2	0.12	0.01

Emission Daint No. (1)	Course Name (2)	Air Contominant Name (2)	Emission Rates			
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	lbs/hour	TPY (4)		
		H ₂ SO ₄	0.02	< 0.01		
TANK-1	Diesel Storage Tank	VOC	0.025	<0.01		
FUG-1	Natural Gas,	VOC	0.76	3.33		
	Condensate, and Oil Fugitives (7)	H ₂ S	< 0.01	< 0.01		
CTOWER-1	Cooling Tower 1			10.72		
		HOCl	0.06	0.28		
		HCl	0.04	0.19		
		H ₂ SO ₄	< 0.01	< 0.01		
		VOC	0.02	0.07		
LOADING	Natural Gas Condensate Truck	VOC	10.86	< 0.01		
	Loading	H ₂ S	0.1	<0.01		
SCAVTK1	Hydrogen	VOC	0.03	0.13		
	Scavenging Tank Vent for Unit 1A	PM/PM ₁₀ /PM _{2.5}	0.03	0.13		
SCAVTK2	Hydrogen	VOC	0.03	0.13		
	Scavenging Tank Vent for Unit 1B	PM/PM ₁₀ /PM _{2.5}	0.03	0.13		
CONDTK-1	Condensate Storage	VOC	0.09	0.36		
	Tank No. 1	H ₂ S	< 0.01	< 0.01		

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.

(2) Specific point source name. For fugitive sources, use area name or fugitive source name.

(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1

NO_x - total oxides of nitrogen

SO₂ - sulfur dioxide

PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented

 PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as

represented

PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter

CO - carbon monoxide

H₂S - hydrogen sulfide

HCl - hydrochloric acid

HOCl - hypochlorous acid

H₂SO₄ - sulfuric acid

(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.

- (5) Turbine oil mist vent emissions are an estimate only based on estimates from mist vent eliminatory manufacturer data.
- (6) Emissions are based on normal operation of 120 operating hours per year.

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Date:	April 5, 2011

SPECIAL CONDITIONS

Permit Numbers 41941 and PSDTX948

- 1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources Maximum Allowable Emission Rates," and those sources are limited to the emission limits and other conditions specified in the attached table. The annual rates are based on any consecutive 12-month period. This permit authorizes planned maintenance, start-up, and shutdown (MSS) activities which comply with the emission limits in the maximum allowable emission rates table (MAERT).
- 2. The following sources are authorized under Title 30 Texas Administrative Code Chapter 106 (30 TAC Chapter 106): **(04/11)**

Permit By Rule	Permit by Rule (PBR) No.	Operation or Source Description
Comfort Heating	106.102	Comfort heating systems
Comfort air conditioning systems	106.103	A/C systems
Bench-scale laboratory equipment used for chemical and physical analysis	106.122	Water treatment and cooling tower water quality daily analysis
Soldering, Brazing, and Welding	106.227	Miscellaneous welding and soldering
Routine Maintenance, Startup and Shutdown of Facilities, and Temporary Maintenance Facilities	106.263	Miscellaneous maintenance activities (in-place painting, in-place blast cleaning, etc.)
Handheld and Manually Operated Machines	106.265	Miscellaneous machining, drilling, cutting, sawing, grinding, gluing, and other hand-held equipment operations
Cooling Water Units	106.371	Water treatment systems, including chemical handling and storage operations, for cooling tower water, evaporative cooler water, and boiler feedwater
Fuel Dispensing	106.412	Diesel and gasoline storage tanks, piping, and dispensing operations supporting plant vehicles

Permit By Rule	Permit by Rule (PBR) No.	Operation or Source Description
Degreasing Units	106.454	Parts washers and associated solvent handling
Organic and Inorganic Liquid Loading and Unloading	106.472	Storage and handling operations for hydraulic oil, transmission oil; lube oil; seal oil; used oil and grease.
Water and Wastewater Treatment	106.532	Oil/water separators
Portable and Emergency Engines and Turbines	106.511	Doosan diesel-fired reciprocating engine

FEDERAL APPLICABILITY

- 3. These facilities shall comply with applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources, Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart A, General Provisions and the following:
 - A. Subpart Da, Electric Utility Steam Generating Units
 - B. Subpart GG, Stationary Gas Turbines

If any condition of this permit is more stringent than the regulations so incorporated, then for the purposes of complying with this permit, the permit shall govern and be the standard by which compliance shall be demonstrated.

EMISSION STANDARDS AND OPERATING SPECIFICATIONS

4. The two General Electric Frame 7FA (PG7241[FA]) combustion turbine generator (CTG) units authorized by this permit are each rated for a nominal maximum power output of 161 megawatts (MW) 69° F case and 190 MW -2° F case. The steam turbine produces a nominal 200 MW for a combined nominal capacity of 580 MW in combined cycle operation.

SPECIAL CONDITIONS Permit Numbers 41941 and PSDTX948 Page 3

- 5. Each heat recovery steam generating (HRSG) unit duct burner is limited to a maximum heat input capacity of 300 million British thermal units per hour (MMBtu/hr) based on the higher heating value (HHV) of natural gas.
- 6. Each CTG shall normally operate at 100 percent (100%) base load except for periods of start-up or shutdown. Reduced load operation to accommodate periods of reduced power and steam demands and during combustion tuning operations are authorized, provided the maximum pounds per hour (lbs/hr) emission rates specified in the MAERT for Emission Point Nos. (EPNs) STACK1 or STACK2 are not exceeded.
- 7. Fuel for CTGs and HRSG duct burners is limited to pipeline-quality natural gas containing no more than 5.0 grains total sulfur per 100 dry standard cubic feet (dscf) on a short-term basis and 0.8 grain total sulfur per 100 dscf on a rolling 12-month average basis. Use of any other fuel requires authorization from the TCEQ.
- 8. The permit holder shall monitor fuel consumption continuously using a monitoring device that is accurate to \pm 5% and maintained, calibrated, and operated in accordance with the manufacturer's specifications. The monitoring device shall be calibrated in accordance with the manufacturer's recommendations or at least annually.
- 9. The firewater pump diesel engine is authorized to fire distillate fuel oil containing not more than 0.3 weight percent sulfur and is limited to a maximum of 120 non-emergency hours of operation annually.
- 10. The firewater pump diesel engine (EPN FWP-1) is limited to 30 minutes of testing in any single hour. Any operations in excess of this times is subject to reporting under 30 TAC § 101.201. (04/11)
- 11. Upon request by the Executive Director of the Texas Commission on Environmental Quality (TCEQ) or any local air pollution control program having jurisdiction, the holder of this permit shall provide a sample and/or an analysis of the fuels fired in the gas turbines, duct burners, and firewater pump engine or shall allow air pollution control agency representatives to obtain a sample for analysis.
- 12. <u>CTG Emission Limits</u> Compliance with this condition shall be demonstrated by completion of the initial stack sampling as described in Special Condition No. 17. Continuous compliance does not have to be demonstrated for this condition. The emission limits of this condition apply at 100% base load and do not apply during periods of reduced load operation and start-up or shutdown.

- A. Emissions of NO_x shall not exceed 9 parts per million by volume dry basis (ppmvd) (one-hour average) when corrected to 15% oxygen (O₂), without correction to International Standards Organization (ISO) conditions.
- B. Emissions of CO shall not exceed 9 ppmvd (one-hour average).
- C. Emissions of volatile organic compounds (VOC), defined as total hydrocarbons minus methane and ethane and measured as methane, shall not exceed 1.4 ppmvw (one-hour average).
- 13. <u>HRSG Duct Burner Emission Limits</u> Compliance with this condition shall be demonstrated by completion of the initial stack sampling as described in Special Condition No. 17. Continuous compliance does not have to be demonstrated for this condition.
 - A. Emissions of NO_x shall not exceed 0.08 pounds per million British thermal units (lb/MMBtu) for a one hour average based on the higher heating value (HHV) of natural gas.
 - B. Emissions of CO shall not exceed 0.10 lb/MMBtu (one-hour average) based on the HHV of natural gas.
 - C. Emissions of VOC shall not exceed 0.0055 lb/MMBtu (one-hour average) based on the HHV of natural gas.
- 14. Combined CTG and HRSG Duct Burner Stack Emission Limits: Compliance with this condition shall be demonstrated by completion of the initial stack sampling as described in Special Condition No. 17. Continuous compliance does not have to be demonstrated for this condition. The emission limits of this condition apply at 100% base load and do not apply during periods of reduced load operation and start-up or shutdown.
 - A. Emissions of NO_x shall not exceed 12.6 ppmvd (one-hour average) when corrected to 15% O_2 .
 - B. Emissions of CO shall not exceed 25.0 ppmvd (one-hour average).
 - C. Emissions of VOC measured as methane shall not exceed 3.0 ppmvd (one-hour average).
- 15. Opacity of emissions from any one stack authorized by this permit shall not exceed 5% averaged over a six-minute period during normal operations and 15% average over a six-minute period during periods of planned maintenance, start-up or shutdown.

Observations for visible emissions shall be performed and recorded quarterly while the facility is in operation. The visible emission determination must be made in accordance with the U.S. Environmental Protection Agency (EPA) Test Method 22 (Title 40 Code of Federal Regulations [40 CFR] Part 60, Appendix A, Reference Method 22). The observation period when conducting Method 22 shall extend for at least six minutes during normal operations. Contributions from uncombined water shall not be included in determining compliance with this condition. If visible emissions are observed, then the opacity shall be determined by EPA Test Method 9 (40 CFR Part 60, Appendix A, Reference Method 9) and identification of the source and cause of the visible emissions shall be conducted within 24 hours and documented. Corrective action to eliminate the source of visible emissions shall be taken promptly and documented within one week of first observation of the visible emissions.

INITIAL DETERMINATION OF COMPLIANCE

- 16. Sampling ports and platforms shall be incorporated into the design of all exhaust stacks according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities." Alternate sampling facility designs may be submitted for approval by the TCEQ Regional Director.
- 17. The holder of this permit shall perform stack sampling and other testing as required to establish the actual quantities of air contaminants being emitted into the atmosphere from EPNs STACK1, and STACK2. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ <u>Sampling Procedures Manual</u> and in accordance with the appropriate EPA Reference Methods.

Fuel sampling using the methods and procedures of 40 CFR Part 60.335(d) may be conducted in lieu of stack sampling for sulfur dioxide (SO₂). If fuel sampling is used, compliance with 40 CFR Part 60, Subpart GG, SO₂ limits shall be based on 100% conversion of the sulfur in the fuel to SO₂. Any deviations from those procedures must be approved by the Executive Director of the TCEQ prior to sampling. The TCEQ Executive Director or his designated representative shall be afforded the opportunity to observe all such sampling. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense.

- A. The initial performance testing was completed on May 12, 2002.
- B. The TCEQ Austin Regional Office shall be contacted as soon as testing is scheduled but not less than 45 days prior to sampling to schedule a pretest meeting.

SPECIAL CONDITIONS Permit Numbers 41941 and PSDTX948 Page 6

The notice shall include:

- (1) Date for pretest meeting.
- (2) Date sampling will occur.
- (3) Name of firm conducting sampling.
- (4) Type of sampling equipment to be used.
- (5) Method or procedure to be used in sampling.
- (6) Procedure used to determine turbine loads during and after the sampling period.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports. A written proposed description of any deviation from sampling procedures specified in permit conditions, TCEQ, or EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ Regional Director shall approve or disapprove of any deviation from specified sampling procedures. Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Office of Permitting, Remediation, and Registration, Air Permits Division. Test waivers and alternate/equivalent procedure proposals for 40 CFR Part 60 testing which must have EPA approval shall be submitted to the TCEQ Regional Director.

- C. Air emissions from each CTG (duct burners off) shall be tested while firing at full load for the ambient conditions at the time of testing. Air emissions to be sampled and analyzed while at full load include (but are not limited to) NO_x, O₂, CO, VOC, SO₂, particulate matter less than or equal to 10 microns in diameter (PM₁₀), and opacity. Fuel sampling using the methods and procedures of 40 CFR Part 60.335(d) may be conducted in lieu of stack sampling for SO₂.
- D. Air emissions from each CTG (duct burners off) shall be tested while firing at the minimum point in the normal operating range (approximately 50 to 65%). The normal operating range consistent with emission limits is to be determined during stack testing. Each tested load shall be identified in the sampling report. Air emissions to be sampled and analyzed while at partial load include (but are not limited to) CO and VOC. As an alternative, this testing may be performed using the method described in "Alternative Testing & Monitoring for Combustion Turbines", EPA control number 0000063. In addition, a 12-point 0₂ traverse, instead of the 40 CFR Part 60, Subpart GG required 48-point O₂ traverse may be used. All gaseous test runs will be performed at 3 points in the stack. In addition, the 40 CFR Part 75 seven-day drift procedure may be used in lieu of the 40 CFR Part 60 seven-day drift procedure.

E. Air emissions from the HRSG duct burners shall be tested while firing at maximum rated heat capacity with natural gas considering the ambient conditions at the time of testing. Air emissions to be sampled and analyzed include (but are not limited to) NO_x, O₂, CO, VOC, SO₂, PM₁₀, and opacity. Fuel sampling using the methods and procedures of 40 CFR Part 60.335(d) may be conducted in lieu of stack sampling for SO₂.

The HRSG duct burner emissions shall be calculated as the remainder of emissions when subtracting the CTG stack emissions with the duct burners out of service from the CTG stack emissions with the duct burners in service. The CTG must be operating at a maximum rate for the ambient conditions and shall be fired with natural gas. For the purposes of demonstrating initial compliance, emissions from the HRSG duct burners shall not exceed the limits in Special Condition No. 13.

- F. Sampling of each gas turbine, and duct burner shall occur within 60 days after achieving the maximum production rate at which each will be operated but no later than 180 days after initial start-up of each unit. Additional sampling shall occur as may be required by the TCEQ or EPA.
- G. Within 60 days after the completion of the testing and sampling required herein, three copies of the sampling reports shall be distributed as follows:
 - (1) One copy to the TCEQ Austin Regional Office.
 - (2) One copy to the TCEQ Austin Office of Permitting and Registration, Air Permits Division.
 - (3) One copy to the EPA Region 6 Office, Dallas.

CONTINUOUS DETERMINATION OF COMPLIANCE FOR NO_x AND CO

18. The holder of this permit shall install, calibrate, maintain, and operate a continuous emission monitoring system (CEMS) to measure and record the concentrations of NO_x, CO, and O₂ from each Combustion Turbine Generator stack (EPNs STACK1 and STACK2). The initial certification and Relative Accuracy Test Audit shall be conducted prior to or during the sampling required by Special Condition No. 17.

- A. Monitored NO_x and CO concentrations shall be corrected and reported in dimensional units corresponding to the emission rate and concentration limits established for the CTG and duct burners in this permit.
- B. The permit holder shall assure that the CEMS meets the applicable quality-assurance requirements specified in 40 CFR Part 60, Appendix F, Procedure 1, or an acceptable alternative. All CEMS downtime of one-hour or greater shall be recorded by the CEMS. Relative accuracy exceedances, as specified in 40 CFR Part 60, Appendix F, Section 5.2.3, and any CEMS downtime shall be reported to the appropriate TCEQ Regional Manager, and necessary corrective action shall be taken. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Director.
- C. The NO_x and O₂ CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and data analysis and reporting requirements specified in the applicable performance specifications in 40 CFR Part 75, Appendix A.
 - The requirements of 40 CFR Part 75, Appendix A and B, respectively, are deemed an acceptable alternative to the performance specifications and quality-assurance requirements of 40 CFR Part 60 for NO_x and O₂ CEMS provided the facility does not use the substitute data values derived from the missing data procedures in Subpart D of Part75 nor have the data bias adjusted according to the procedures of Part 75.
- D. The monitoring data shall be reduced to hourly average values at least once per day, using a minimum of four equally-spaced data points from each one-hour period. The individual average concentrations shall be reduced to units of pounds per hour at least once per day. Two valid data points shall be generated during the hourly period in which zero and span is performed.
- E. All monitoring data and quality-assurance data shall be maintained by the source for a period of two years and shall be made available to the TCEQ Executive Director or his designated representative upon request. The data from the CEMS may, at the discretion of the TCEQ, be used to determine compliance with the conditions of this permit. Hourly average concentrations from EPNs STACK1 and STACK2 shall be summed to tons per year and used to determine compliance with the annual emission limits of this permit.
- F. The appropriate TCEQ Regional Office shall be notified at least 30 days prior to any required relative accuracy test audit (RATA) in order to provide them the opportunity to observe the testing.

- G. Quality-assured (or valid) data shall be generated when the gas turbines and duct burners are operating except during the performance of daily zero and span checks and quarterly quality assurance tests. Loss of valid data due to periods of monitor breakdown, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 % of the time (in minutes) the gas turbines and duct burners operated over the previous rolling 12-month period.
- 19. If any emission monitor fails to meet specified performance, it shall be repaired or replaced immediately, but no later than seven days after it was first detected by any employee at the facility, unless written permission is obtained from the TCEQ which allows for a longer repair/replacement time. The holder of this permit shall develop an operation and maintenance program (including stocking necessary spare parts) to ensure that the continuous monitors are available as required.
- 20. The holder of this permit shall additionally install, calibrate, maintain, and operate continuous monitoring systems to monitor and record the average hourly natural gas consumption of the gas turbines and the duct burners. The systems shall be accurate to ±5.0 % of the unit's maximum flow.
- 21. The holder of this permit shall monitor the fuel fired in the gas turbines and duct burners for fuel-bound sulfur as specified in 40 CFR Part 60.334(h). Any request for a custom monitoring schedule shall be made in writing and directed to the TCEQ Regional Director. Any custom schedule approved by TCEQ pursuant to 40 CFR Part 60.334(h) will be recognized as an enforceable condition of this permit.

ROUTINE MAINTENANCE STARTUP AND SHUTDOWN

- 22. The holder of this permit shall operate the equipment and associated air pollution control equipment in accordance with good air pollution control practice to minimize emissions during planned maintenance, start-up and shutdown (MSS), by operating in accordance with a written MSS plan. The emissions from MSS activities are reflected in the MAERT. These emissions will be minimized by the following:
 - A. Facility and air pollution control equipment will be operated in a manner consistent with good practices for minimizing emissions.
 - B. The duration of operation in MSS mode will be minimized and the applicable emissions monitoring systems will be kept in operation.

- C. MSS activities are authorized provided that the NO_x, CO and VOC emission rates in pounds per hour (lb/hr) do not exceed those specified in the MAERT and comply with the tons per year specified in the MAERT.
- 23. Startup is defined as the period that begins when the combustion turbine generator is initiated, meaning fuel flow is indicated, and ends when the 6Q stage of combustion is achieved. A startup is also considered to begin when, during normal operations, there is a recoverable auto unload runback, and the startup ends when the turbine is back in the 6Q combustion mode.
 - A. Cold startup events shall not exceed sixteen hours each. A cold startup is defined as a startup after a unit has received no fuel for a period of 64 hours or more or Steam Turbine temperature is less than 400° F.
 - B. Warm startup events shall not exceed five hours each. A warm startup is defined as a startup after a unit has received no fuel for a period more than 16 hours, but less than 64 hours or the Steam Turbine temperature is greater than 400° F but less than 700° F.
 - C. Hot startup events shall not exceed two hours each. A hot startup is defined as a startup when the unit has received no fuel for 16 hours or less or the Steam Turbine temperature is greater than 700° F. A shutdown is defined as the planned period that begins with the reduction of fuel flow to the turbine below the level necessary to maintain 6Q operations and ends when the unit is no longer receiving fuel.
 - D. Unplanned or emergency shutdowns are required to comply with the requirements of 30 TAC § 101.201.
- 24. The following planned maintenance activities are permitted in accordance with the written MSS plan:
 - A. Combustion tuning activities shall not exceed eight hours and may be performed up to eight times per year.
 - B. All other activities that meet the requirements of 30 TAC § 106.263, Routine Maintenance, Start-up and Shutdown of Facilities, and Temporary Maintenance Facilities are authorized.

SPECIAL CONDITIONS Permit Numbers 41941 and PSDTX948 Page 11

PERIODIC MONITORING FOR COOLING TOWERS

- 25. The water in the Cooling Tower (EPN CTOWER-1) shall not exceed a total dissolved solids (TDS) concentration of 6,000 parts per million by weight (ppmw).
 - A. A conservative default conversion factor of 0.80 (TDS to conductivity) may be used initially until a site specific demonstrated value is determined.
 - B. The holder of this permit shall perform sampling to establish the TDS to conductivity conversion factor (in ppmw per micromho/centimeter (μmho/cm)) that shall be used by the permit holder to demonstrate compliance in accordance with Special Condition No. 25. A cooling water sample shall be collected in each of the three calendar months following the effective date of this permit and a conductivity and TDS analysis shall be performed for each of the three samples in order to establish the actual cooling water TDS to conductivity conversion factor. The conductivity and TDS analyses shall be performed in accordance with "Standard Methods for the Examination of Water and Wastewater" Method 2510 (Conductivity) and Method 2540 (Solids). An average conversion factor and standard deviation based on the three values shall be determined from the cooling water sample results.
 - C. Within 30 days after completion of the sampling, copies of the sampling report shall be submitted to the Texas Commission on Environmental Quality (TCEQ) Austin Regional Office.
 - D. Continuous compliance with the hourly and annual particulate matter emission rates for the Cooling Tower in the MAERT shall be demonstrated by the holder of this permit by monitoring the conductivity of the cooling water at a monitoring point in the recirculating water of the cooling tower, and recording these conductivity readings on a no less than weekly basis. Each conductivity measurement shall be converted to TDS concentration in ppmw using the TDS to conductivity conversion factor established in accordance with Special Condition No. 25B.

RECORDKEEPING REQUIREMENTS

- 26. The following records shall be kept at the plant for the life of the permit. All records required in this permit shall be made available at the request of personnel from the TCEQ, EPA, or any air pollution control agency with jurisdiction.
 - A. A copy of this permit.

- B. Permit applications submitted on July 28, 1999, September 22, 2009 and subsequent representations submitted to the TCEQ.
- C. A complete copy of the testing reports and records of the initial performance testing completed pursuant to Special Condition No. 17 to demonstrate initial compliance.
- D. Required stack sampling results or other required air emissions testing (other than CEMS data) that may be conducted on units authorized under this permit after the date of issuance of this permit.
- 27. The following information shall be maintained at the plant by the holder of this permit in a form suitable for inspection for a period of five years after collection and shall be made immediately available upon request to representatives of the TCEQ, EPA, or any local air pollution control program having jurisdiction.
 - A. Records of visible emission/opacity observations as specified in Special Condition No. 15.
 - B. The NO_x, CO, and diluent gases, O₂ or CO₂, CEMS emissions data to demonstrate compliance with the emission rates listed in the maximum allowable emission rates table (MAERT).
 - C. Raw data files of all CEMS data including calibration checks and adjustments and maintenance performed on these systems as required by Special Condition No. 18.
 - D. Fuel consumption records as required by Special Conditions No. 20.
 - E. Records of the hours of operation of the firewater pumps in accordance with Special Condition No. 10. (04/11)
 - F. Records of fuel sampling conducted in accordance with Special Condition No. 21.
 - G. The performance and emissions associated with each planned MSS activity authorized by this permit. The annual MSS emissions shall be updated on a monthly basis. These records shall include the following information:
 - (1) The physical location at which emissions from the planned MSS activity occurred, including the emission point number, common name and any other identifier for the point at which the emissions were released into the atmosphere;
 - (2) The type of planned MSS activity and the reason for the planned activity;

- (3) The common name and the facility identification number of the facilities at which the planned MSS activity and emissions occurred;
- (4) The date and time of the planned MSS activity and its duration;
- (5) The quantity of each air contaminant or mixture of air contaminants emitted along with the data and methods used to determine it. The emissions shall be estimated using the methods identified in the planned MSS permit application, submitted February 9, 2010, consistent with good engineering practice. These emissions are subject to the limits in the MAERT.
- H. The cooling tower monitoring data required by Special Condition No. 25 including:
 - (1) Location of the monitoring point for the cooling tower recirculating water and date and time of monitoring.
 - (2) Weekly measured conductivity in μomhs/cm and the equivalent TDS in ppmw in the recirculating water of the cooling tower.

REPORTING

- 28. The holder of this permit shall submit to the TCEQ Austin Regional Office quarterly reports as described in 40 CFR Part 60.7. Such reports are required for each emission unit which is required to be continuously monitored pursuant to this permit. In addition to the information specified in 40 CFR Part 60.7(c), each report shall contain the hours of operation of the equipment authorized by this permit and a report summary of the periods of excess emissions and CEMS downtimes by cause.
- 29. For the purposes of reporting pursuant to Special Condition No. 28, excess emissions from equipment authorized by this permit shall be defined as follows:
 - A. Excess emissions of NO_x or CO shall be defined as each one-hour period of operation during which the average emissions as measured and recorded by the CEMS exceed the applicable pound-per-hour emission limitations specified in the MAERT.
 - B. Excess annual emissions of NO_x or CO shall be defined as any 12-month period of operation during which the 12-month cumulative emissions exceeds the annual limits specified in the MAERT of this permit.

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- C. Excess emissions of SO₂ shall be defined as emissions resulting from firing fuel which is found to contain sulfur in excess of the limits of Special Condition No. 7 or which indicates exceedance of the SO₂ limitation specified in the MAERT based on 100 % conversion of the sulfur in the fuel to SO₂.
- 30. If the average NO_x or CO stack outlet emission rate exceeds the maximum allowable emissions rate for more than one hour, the holder of this permit shall investigate and determine the reason for the exceedance and, if needed, make necessary repairs and/or adjustments as soon as possible. If the NO_x or CO emission rate exceeds the emission rate in the MAERT for more than 24 hours, the permit holder shall notify the TCEQ Regional Office either verbally or with a written report detailing the cause of the increase in emissions and all efforts being made to correct the problem.

Dated: April 5, 2011